REMARKS

Examiner William Boddie is thanked for the thorough examination and search of the subject Patent Application.

Claim 99 has been amended.

All Claims are believed to be in condition for Allowance, and that is so requested.

Reconsideration of the rejection of claims 1-3, 8, 11-15, 17-23, 26-32, 37, 40-45,49-54, 57-60, 70. 75, 78-84, 86-92, and 95-98 under 35 U.S.C. 102(e) as being anticipated by Dowling et al. (US 2002/0070688), hereinafter Dowling, is requested, based on amended claims and on following remarks:

Claim **1** of the claimed invention discloses:

1. A system to perform a light show, wherein LED modules are displaying related light beams having defined properties, wherein said properties have been defined prior to performing said light show, is comprising:
an integrated circuit comprising:
an interface to input information;
a memory to store the information about the properties of said beams to be displayed;
a sequencer to control one or more LED drivers;
a LED driver unit comprising a driver for each color of said LED modules able to control the intensity of light where one driver for each LED is used; and

an electrical connection to said LED modules; and
an arrangement of one or more LED modules.

The claimed invention discloses (paragraph 0027, lines 5-10):

"**Said "light show" ASIC 22** comprises a downloadable, free programmable sequencer **23**, an LED driver unit **24**, being connected to six modules of LEDs **25** via nine pins **26** and a multiplexer arrangement. In a preferred embodiment of the invention said free programmable sequencer **23** is implemented on an ASIC."

Dowling **does neither disclose** using "**an integrated circuit** comprising an interface to input information, nor **a memory to store the information about the properties of said beams to be displayed**, a sequencer to control one or more LED drivers, an LED driver unit comprising a driver for each color of said LED modules able to control the intensity of light where one driver for each LED is used, and output pins for an electrical connection to said LED modules wherein said output pins are controlled and arranged by multiplexing means, and an arrangement of one or more LED modules," as Claim **1** of the claimed invention does.

Dowling shows in his **Fig. 1** a block diagram of his invention comprising a processor **2**, a memory **6** and three controllers **3**.

Furthermore Dowling discloses in the middle of (paragraph 54):

"The processor **2** and controller **3** may be incorporated into one device, e.g., sharing **a single semiconductor package**. This device may drive several LEDs 4 in series where it has sufficient power output, or the device may drive single LEDs

4 with a corresponding number of outputs. By controlling the LEDs 4 independently, color mixing can be applied for the creation of lighting effects."

It is known in the art that a single **semiconductor package**, as disclosed by Dowlings, is different to **an integrated circuit**, i.e. one single chip, as disclosed by the claimed invention. A semiconductor package is a package that comprises more than one chip wherein the different chips are often interconnected.

Furthermore Dowling discloses in his paragraph 54 shown above an incorporation of processor **2** and controllers **3** only. Dowling does not mention an incorporation of his memory **6** shown in his **Fig. 1**. Albeit the "processor that can include computer executable code" as disclosed by Dowling inherently may comprise memory, this memory is different to the memory of the claimed invention, which discloses in claim **1 "a memory to store the information about the properties of said beams to be displayed"**. The inherent memory of Dowling might be used to store **executable code**, wherein the memory disclosed by claim 1 of the claimed invention refers to a memory storing **data**.

Furthermore Dowling discloses in paragraph 53:

"[0053] As used herein, the term processor may refer to any system for processing electronic signals. A processor may include a microprocessor, microcontroller, programmable digital signal processor or other programmable device, along with **external memory** such as read-only memory, programmable read-only memory, electronically erasable programmable read-only memory, random access memory, dynamic random access memory, double data rate random access memory, Rambus direct random access memory, flash memory, or any other volatile or non-volatile memory for storing program instructions, program data, and program output or other intermediate or final results."

It has to be noted that Dowling does not disclose "**a memory to store the information about the properties of said signals to be displayed**" as the claimed does The claimed invention discloses an integrated circuit comprising this kind of memory among all the other components. Applicant therefore respectfully disagrees that Dowling discloses "**a memory to store the information about the properties of said signals to be displayed.** Furthermore applicant respectfully disagrees that Dowling discloses the integration of all components in a single integrated circuit as the claimed does because a semiconductor package, as disclosed by Dowling, is different to a single integrated circuit of the claimed invention. Therefore applicant believes that the claimed invention is not being anticipated by Dowling

Claims 2, 3, 8, 11-15, 17-20, 22-23, and 26-29 are dependent claims upon base claim 1 which is believed to be patentable according to the arguments outlined above.

Claim **30** discloses:

30. A system for visual, electronic communication, highlighting information/events, wherein LED modules are displaying related light signals having defined properties representing said different information/events, is comprising:
an integrated circuit comprising:
an interface to input information;
a memory to store the information about the properties of said signals to be displayed;
a sequencer to control one or more LED drivers;
a LED driver unit comprising a driver for each color of LED able to control the intensity of light where one driver for each LED is used; and
an electrical connection to said LED modules; and

an arrangement of one or more LED modules.

The same arguments apply for claim **30** as outlined above for Claim **1**. Dowling does neither disclose an integrated circuit comprising all components of the claimed invention nor especially "a memory to store the information about the properties of said signals to be displayed "while the claimed invention discloses an integrated circuit comprising such a memory as outlined above.

Claims **31-32, 37, 40-45, 49-51, 53-54, and 57-60** are dependent claims upon base claim **30** which is believed to be patentable according to the arguments outlined above.

Claim **61** has been likewise amended as base claims **1** and **30**:

61. A phone system highlighting information/events, wherein LED modules are displaying related signals representing said different information/events, is comprising:
an integrated circuit comprising:
an interface to input of information;
a memory to store the information about the properties of said signals to be displayed;
a sequencer to control one or more LED drivers;
a LED driver unit comprising a driver for each color of LED able to control the intensity of light where one driver for each LED is used; and
an electrical connection to said LED modules; and
an arrangement of one or more LED modules.

The same arguments apply for claim **61** as outlined above for Claim **1**. Dowling does neither disclose an integrated circuit comprising all components of the claimed

invention nor especially "a memory to store the information about the properties of said signals to be displayed "while the claimed invention discloses an integrated circuit comprising such a memory as outlined above.

Claims **65, 67-70, 75, 78-84, 86-89, 91-92, and 95-98** are dependent claims upon base claim **61,** which is believed to be patentable according to the arguments outlined above.

Reconsideration of the rejection of claims 4-7, 33-36, 71-74, 99-100, and 102-106 under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688), hereinafter Dowling, in view of Mueller et al. (US 6,016,038), hereinafter Mueller, is requested, based on amended claims and on the following remarks:

Claims 4-7 are dependent claims upon base claim 1, claims 33-36 are dependent claims upon base claim 30, and claims 71-74 are dependent claims upon base claim 61, all these three base claims 1, 30 and 61 are believed to be patentable according the arguments outlined above.

The amended claim **99** of the claimed invention discloses:

99. A method to establish visual, electronic communication, highlighting information/events, wherein LED modules are displaying related light signals having defined properties representing said different information/events comprising:

providing an **integrated circuit** comprising an interface, **a memory to store the information about the properties of said signals to be displayed**, a

sequencer, a LED driver unit connected to LEDs, and one or more LED modules, comprising more than one LED each;

determine the information to be visually highlighted;

define the kind of highlighting of the information selected above;

compose the sequencer steps according to the definitions of the two steps above;

if said composing software is built into a phone, store the sequences in said memory;

otherwise download sequences and store them in said memory; and ready for operation.

In regard of the disclosure of Dowling the same arguments apply for claim **99** as outlined above for Claim **1**. Dowling does neither disclose an **integrated circuit** comprising all components of the claimed invention nor especially comprising "**a memory to store the information about the properties of said signals to be displayed**" while the claimed invention discloses an integrated circuit comprising such a memory as outlined above.

Mueller et al. disclose (col. 2, lines 21-37) :

> "In brief, the invention herein comprises a pulse width modulated current control for an LED lighting assembly, where each current-controlled unit is uniquely addressable and capable of receiving illumination color information on a computer lighting network. In a further embodiment, the invention includes a binary tree network configuration of lighting units (nodes). In another embodiment, the present invention comprises a heat dissipating housing, made out of a heat-conductive material, for housing the lighting assembly. The heat dissipating housing contains two stacked circuit boards holding respectively the power module and the light module. The light module is adapted to be conveniently interchanged with other light modules having programmable current, and hence maximum light intensity, ratings. Other embodiments of the present invention involve novel applications for the general principles described herein.

Furthermore Mueller et al. discloses using **multiple integrated circuits** while in the claimed invention all components are integrated in **one integrated circuit** as disclosed in base claim **99**.

Mueller discloses (col. 4, lines 17-19):

"Also connected to pin connector 210 are three current programming integrated circuits, ICR 220, ICB 240 and ICG 260."

Furthermore Mueller discloses (col. 4, 48-54)

"The red, blue and green LED currents enter another integrated circuit, IC1 380, at respective nodes 324, 344 and 364. IC1 380 is preferably a high current/voltage Darlington driver, part no. DS2003 available from the National Semiconductor Corporation, Santa Clara, Calif. IC1 380 is used as a current sink, and functions to switch current between respective LED sets and ground 390."

Moreover Mueller discloses (col.5, lines 12-14):

"The structure and operation of microcontroller IC2 400 will now be described. Microcontroller IC2 400 is preferably a MICROCHIP brand PIC16C63,"

None of the applied references address the systems and methods of the claimed invention having integrated on **ONE** integrated circuit all components required, inclusive "**a memory to store the information about the properties of said signals to be displayed**" to control said LED modules as described in amended base claim **99** of the claimed invention outlined above.

Base claim **99** is believed to be patentable over Dowling (US 2002/0070688) in view of Mueller (US 6,016,038) as it is respectfully suggested that the combination of these two references cannot be made without reference to Applicant's own invention.

The method of base claim **99** is believed to be novel and patentable over these references because a combination of the claimed elements would not address the method of the claimed invention, providing an **integrated circuit** comprising an interface, **a memory to store the information about the properties of said signals to be displayed**, a sequencer, a LED driver unit connected to LEDs, and one or more LED modules, comprising more than one LED each; and would not be obvious to one skilled in art. That is to say there must be something in the prior art or line of reasoning to suggest that the combination of these two references is desirable. We believe that there is no such basis for the combination.

Claims **100** and **102-106** are dependent claims upon base claim **99** which is believed to be patentable according to the arguments outlined above.

Reconsideration of the rejection of claims **9-10**, **38-39**, and **76-77** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Tokimoto et al. (US 6,690,341) is requested, based on the following remarks:

Claims **9-10** are dependent claims upon base claim **1,** claims **38-39** are dependent claims upon base claim **30**, and claims **76-77** are dependent claims upon base claim **61**, all these three base claims **1**, **30** and **61** are believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claims **16**, **47** and **85** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Nishimura et al. (US 2003/0013484) is requested, based on the following remarks:

Claim **16** is a dependent claim upon base claim **1,** claim **47** is a dependent claim upon base claim **30**, and claim **85** is a dependent claim upon base claim **61**, all these three base claims **1**, **30** and **61** are believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claims **24-25**, **55-56** and **93-94** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Sasaki et al. (US 6,404,139) is requested, based on the following remarks:

Claims **24-25** are dependent claims upon base claim **1,** claims **55-56** are dependent claims upon base claim **30**, and claims **93-94** are dependent claims upon base claim **61**, all these three base claims **1**, **30** and **61** are believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claims 62-63 under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Lys et al. (US 6,528,954) is requested, based on the following remarks:

Claims **62-63** are dependent claims upon base claim **61**, which is believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claim **64** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Kitano et al.. (US 2003/0216151) is requested, based on the following remarks:

Claim **64** is a dependent claim upon base claim **61**, which is believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claim **66** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Kota et al.. (US 7,003,318) is requested, based on the following remarks:

Claim **66** is a dependent claim upon base claim **61**, which is believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claim **101** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Mueller et al.. (US 6,016,038) and further in view of Tokimoto et al. (US 6,690,341) is requested, based on the following remarks:

Claim **101** is a dependent claim upon base claim **99**, which is believed to be patentable according the arguments outlined above.

Reconsideration of the rejection of claim **107** under 35 U.S.C. 103(a) as being unpatentable over Dowling et al. (US 2002/0070688) in view of Mueller et al.. (US 6,016,038) and further in view of Nishimura et al. (US 2003/013484) is requested, based on amended claims and on the following remarks:

Claim **107** is a dependent claim upon base claim **99**, which is believed to be patentable according the arguments outlined above.

Allowance of all Claims is requested.

It is requested that should the Examiner not find that the Claims are now Allowable that the Examiner call the undersigned at 845-452-5863 to overcome any problems preventing allowance.

Respectfully submitted,

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